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Sodium Bichromate

The International Metals & Chemicals Group
METALSAMERICA/PPBTECHNOLOGIES

MATERIAL SAFETY DATA SHEET

NUMBER: 1053

SECTION I

MANUFACTURER'S NAME: Various
(AMERICHEM as Distributor)ADDRESS: One Pitcairn Place
165 Township Line Road
Jenkintown, PA 19046-3531
1-215-517-6000DOT SHIPPING NAME: Toxic solids, inorganic, n.o.
(sodium bichromate), 6.1, UN3288, PGIII, RQ

CAS NUMBER: 10588-01-9

REPORTABLE QUANTITY: 10 lbs/4.54 KG

CHEMICAL NAME AND SYNONYMS:

Sodium Bichromate

TRADE NAME AND SYNONYMS:

Sodium Dichromate Crystal, Chromic Acid, Disodium Sal

CHEMICAL FAMILY/FORMULA: $\text{Cr}_2\text{Na}_2\text{O}_7 \cdot 2\text{H}_2\text{O}$
Inorganic Acid

EMERGENCY TELEPHONE NUMBER:

Chemtrec: 800-424-9300

Outside USA Call: 212-483-7616

SECTION II - HAZARDOUS INGREDIENTS

Section 313 Supplier Notification This product contains 32% Chromium and is subject to the reporting requirements of Section 31 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372. This information must be included in all Material Safety Data Sheets that are copied and distributed for this material. No other hazardous material is present in concentration greater than 1%.

SECTION III - PHYSICAL DATA

BOILING POINT:	400°C Decomposes	MELTING POINT:	356°
SPECIFIC GRAVITY ($\text{H}_2\text{O} = 1$)	2.34	VOLATILITY/VOL (%):	N/A
SOLUBILITY IN WATER:	at 20°C 73.0%	VAPOR PRESSURE (mm Hg.):	N/A
VAPOR DENSITY (AIR = 1)	N/A	EVAPORATION RATE (____) = 1:	N/A
DENSITY (g/cc):	N/A	FORMULA WEIGHT:	
APPEARANCE AND ODOR:	Orange-red crystal, no odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT (METHOD USED): Not flammable

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: Water spray, fog or regular foam, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Material is a strong oxidizer especially in presence of sulfuric acid. May ignite saw dust by prolonged contact. It will lower ignition points of combustible materials. Keep unnecessary people. Isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Do not touch or walk through spilled material. Wear self contained breathing apparatus. Chemical protective clothing which is specifically recommended by the shipper or manufacturer may be worn. It may provide little or no thermal protection. Structural firefighters' protective clothing is NOT effective for this material. UNUSUAL FIRE AND EXPLOSION HAZARDS: Under extreme heat, it will decompose to Cr and O_2 (gas). The latter will support combustion. Move container from the fire area if you can do it without risk. Fight fire from maximum distance. Do not use fire control water for later disposal. Do not scatter the material. Remove and isolate contaminated clothing at the site.

NFPA Ratings: Health(3); Flammability(1); Instability(2); Special Hazard (OX)

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THRESHOLD LIMIT VALUE: OSHA PEL - TWA 1.0 mg(CrO₃)/m³, ACGIH TLV - TWA 0.05 (Cr)/m³ NIOSH REL - TWA 0.1 mg[C(VI)]/m³. **EFFECTS OF OVEREXPOSURE:** Dry or wet material is corrosive to eye and skin tissue. Contact of very small quantities of dust or mist with the eyes can quickly result in severe burns. Inhalation of dust or mist can cause damage to the mucous membranes, perforation of nasal septum, and irritation of the respiratory system. Skin contact can cause severe burns, external ulceration and ulceration of broken skin, "chrome sores." Can be absorbed through the skin and cause systemic poisoning. Ingestion can cause burns to the digestive tract and swallowing of even a small quantity can be fatal due to burns as well as systemic effects. **CHRONIC EFFECTS:** May alter genetic material, damage to the liver, and damage to kidneys. **TARGET ORGAN DATA:** Lungs, thorax respiration (tumors) Tumorigenic (Carcinogenic by RTECS Criteria) Only selected registry of toxic effects of chemical substance (RTECS) data is presented here. **EMERGENCY AND FIRST AID PROCEDURES:** **EYES:** Flush eyes with water holding eyelids open for 15 minutes. **SKIN:** Remove contaminated clothing. Speed in removing contaminated clothing is of extreme importance. Flush skin with soap and water. **INHALATION:** Remove to fresh air. **INGESTION:** **DO NOT INDUCE VOMITING.** Do not give anything by mouth to unconscious person. Drink plenty of milk or water. If vomiting occurs spontaneously, keep airway clear and give more water. Effects of exposure to this product may be delayed. Keep victim under observation. **SEEK MEDICAL ATTENTION IN THE EVENT OF ANY ACCIDENTAL EXPOSURE TO THIS PRODUCT.** **IMMEDIATE ADMINISTRATION OF 1 GRAM ASCORBIC ACID** (effervescent form) by mouth is recommended. **CARCINOGENICITY INFORMATION:** IARC WARNING: Hexavalent Chromium Compounds are suspected carcinogens. This product is TSCA listed.

SECTION VI - REACTIVITY DATA

STABILITY: Stable **INCOMPATIBILITY (MATERIALS TO AVOID):** This product is a strong oxidizing agent. It may react with easily oxidizable/combustible materials especially at elevated temperatures. Both in dry form and in solution this material may violently react with organic materials such as grease and oil especially in a confined space.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it emits toxic fumes of Na₂O. **HAZARDOUS POLYMERIZATION:** Will not occur. **CONDITIONS TO AVOID:** Avoid storage with incompatible materials and excessive heat.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Solids may be shoveled into drums for reuse or disposal. Spilled liquid material should be contained, absorbed with an inert absorbent such as vermiculite, sand or soil and then shoveled or swept into a closed metal container for disposal. All visible spilled material must be removed as outlined above. **WASTE DISPOSAL METHOD:** Sodium Bichromate must not be discharged into sewers or navigable waters or allowed to contaminate underground water sources. Waste should be reclaimed, if possible. If reclamation is not possible contact local waste disposal contractor or perform the following: (1) Carefully and slowly dissolve in plenty of water. Handle solution carefully - can cause severe burns. (2) Reduce trivalent chromium by mixing with reducing agents such as ferrous sulfate. (3) Adjust pH to 8.5 with sodium carbonate to precipitate the trivalent chromium as chromium hydroxide. (4) Filter and dry the precipitated chromium hydroxide and dispose of by burying in an approved, secured hazardous waste landfill, or contact local waste disposal contractor for disposal.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Positive pressure self-contained breathing apparatus.

OTHER PROTECTIVE EQUIPMENT:

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in dry area. When handling, wear rubber gloves, boots and apron, goggles, long-sleeved shirts and hard hat. Respiratory protection where exposure may be above OSHA permissible exposure limit. Keep container closed when not in use. Store away from flammable or combustible materials. **OTHER PRECAUTIONS:** All containers should be kept tightly sealed to avoid moisture pickup. Do not recycle or reuse container. Dispose of empty container in accordance with local, state and federal regulations. Since the actual use by others is beyond the control of The International Metal & Chemicals Group, users must take precautions to ensure that the environmental controls are adequate to maintain the permissible exposure limits applicable.